### DISPUTE REVIEW BOARD RECOMMENDATION

April 8, 2009

Mr. Bill Kyzer Project Administrator AECOM 2222 Colonial Road, Suite 201 Fort Pierce, FL 34950

Mr. Matt Chris Project Manager Hubbard Construction Company 8583 South Federal Highway Port St. Lucie, FL 34952

| RE:      | Add lanes and reconstruct SR5, Rio Mar to CR 712, Fin. Proj. ID 23028825201   |
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| Subject: | Hearing Dated March 31, 2009<br>Disputes Review Board Recommendation<br>Issue : Compensation for Wing Wall Repair at Saeger Box Culvert |

Dear Sirs,

Hubbard Construction Company (HCC) and the Florida Department of Transportation (FDOT) requested a Dispute Review Board hearing for a dispute. The hearing was held on March 31, 2009 at the FDOT Operations Center offices in Ft. Pierce, FL. The parties furnished the Board position papers for review prior to the hearing. The Disputes Review Board was requested only to consider the question of entitlement. In accordance with your request the following recommendation is offered.

# Issue: Whether there is entitlement to seek compensation for Wing Wall Repair work at Saeger Box Culvert

## Background

The project scope involved reconstruction, and rehabilitation of State Roads 5, US 1. Also included were drainage improvements including retention ponds. The scope of drainage improvements included the widening of three existing box culverts by extending both sides of the culverts. The existing condition of the culverts, discovered after construction had begun, required additional repair work. Agreement on a lump sum price was not reached. However, the FDOT added the scope of the repairs to HCC's contract as a cost-plus item. Construction of the box culvert extensions and repairing the existing box culverts required dewatering. Repairs to the Saeger Box Culvert were performed after the east side extension had been completed. After completion of the box culvert repairs the NE wing wall and the foundation were found to have been damaged. The top of the wall was displaced and the foundation was cracked. The FDOT required the contractor to repair the damaged wing wall. The issue before the DRB concerns the contractor's entitlement to seek compensation for repairs to the damaged wing wall.

# **Contractor Position**

The following summary of the Contractor's position is based upon written materials submitted to the Board and upon the hearing presentation.

## **Key Points**

1. <u>Damage to the Wing Wall and Footer was caused by the additional work of repairing the box culvert walls.</u>

The additional work required dewatering efforts which were performed via standard construction practices (sump method). The dewatering caused water and soil material to flow from underneath the culvert and wing wall footer, and ultimately led to the cracking of the footer and floor, and the rotation of the wing wall. HCC had removed the well point dewatering system used for the culvert extension work in order to keep the planned sequence of its work. HCC elected to use the sump pump dewatering method rather than re-installing the well points because the well points would have then conflicted with the planned adjacent roadwork.

2. <u>The additional repair work to the culvert walls was directed and authorized by the FDOT</u>

HCC was directed by Bill Kyzer, the FDOT Project Administrator to perform the additional work of repairing the culvert walls.

The subsequent repairs to the wing wall and foundation were a direct result of the directed repairs to the culvert walls and the costs should be compensated in accordance with Specification 4-3.2
Specification section 4-3.2<sup>1</sup> provides for compensation to the contractor for Increase, Decrease or Alterations in the work directed by the Engineer.

## **Contractor Summary**

The FDOT directed HCC to perform the additional work of repairing the culvert walls. Damage to the wing wall and foundation was a direct result of the dewatering operations necessary to perform the additional work of repairing the culvert walls. Therefore, the cost of the subsequent wing wall and the subsequent foundation repairs are appropriately included in the total cost of the culvert wall repairs. HCC is requesting that the DRB recommend that HCC is entitled to seek compensation for the cost of repairing the wing wall and foundation.

# **FDOT Position**

The following summary of the FDOT's position is based upon written materials submitted to the Board and upon the hearing presentation.

## **Key Points**

 <u>The damage to the wing wall and foundation may have been caused by the</u> <u>Contractor's improper dewatering method</u>
<u>A sum pump was used for the culvert wall repairs where the wing wall was</u>

A sum pump was used for the culvert wall repairs where the wing wall was damaged. Well point systems were used for all other culvert wall repairs and no wing wall damage occurred. The FDOT did not prescribe the dewatering method to be used.

<sup>&</sup>lt;sup>1</sup> See FDOT Standard Specification for Road and Bridge Construction 2004, Section 4-3.2

- The damage to the wing wall and foundation may have been the result of causes other than the dewatering. The contractor may have not properly prepared the foundation prior to constructing the wing wall. The contractor may have used improper backfilling methods when backfill the embankment adjacent to the damaged wing wall.
- <u>The Contractor is responsible for the work</u> FDOT Specification 7-14 provides that the Contractor is responsible for the work and must rebuild, repair, restore and make good without additional expense to the FDOT.

## Summary

The wing wall damage may have been caused by the Contractor's choice of dewatering method or the damage may have been caused by other unknown reasons. The choice of dewatering method was the Contractor's decision. The Contractor was clearly responsible for the choice of dewatering method. The Contractor was responsible for protecting the wing wall and for repairing any damage. The FDOT is requesting that the DRB deny entitlement to seek compensation for all cost associated with the repairs of the NE wing wall and foundation of the box culvert extension at station 364+76.

# **Disputes Review Board Findings**

- 1. In accordance with specification section 4-3.2 the FDOT directed HCC to perform the additional work of repairing the existing box culvert walls. A fixed price was not agreed to and the work was performed on a "cost plus" basis.
- 2. The FDOT provided a very prescriptive repair procedure for the walls. However, the FDOT did not prescribe the dewatering method to be used. The choice of dewatering method was entirely up to the contractor.
- 3. HCC elected to use a sump pump for dewatering on the Saeger box culvert, which was the first to be repaired.
- 4. Near the completion of the dewatering and repairs to the culvert walls, damage to the NE wing wall and footing was discovered.
- 5. Subsequent culvert wall repairs were accomplished with well point dewatering methods and no wing wall damage occurred with those repair operations.
- 6. The cause of the wing wall damage remains unknown. No forensic geotechnical investigation was performed to discover the cause of the wing wall damage. Subsidence as a result of the sump pump dewatering immediately adjacent to the wing wall foundation is the most likely cause. However, other unknown causes cannot be ruled out.
- 7. FDOT Specification 7-14, cited in its entity below, provides that the Contractor is responsible for the work and must rebuild, repair, restore and make good without additional expense to the FDOT.

### "7-14 Contractor's Responsibility for Work.

Until the Department's acceptance of the work, take charge and custody of the work, and take every necessary precaution against injury or damage to the work by the action of the elements or from any other cause whatsoever, arising either from the execution or from the nonexecution of the work. Rebuild, repair, restore, and make good, without additional expense to the Department, all injury or damage to any portion of the work occasioned by any of the above causes before its completion and acceptance, except that in case of extensive or catastrophic damage, the Department may, at its discretion, reimburse the Contractor for the repair of such damage due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to Acts of God, of the public enemy, or of governmental authorities."

## **Disputes Review Board Recommendation**

The contract terms clearly provide that the Contractor is responsible for protecting the work. The DRB finds no action on the part of the FDOT or HCC that would have shifted the risk assignment provided in the contract.

The Disputes Review Board finds that the Contractor is not entitled to seek compensation for the cost of repairing the subsequent damages to the Saeger Box Culvert wing wall and foundation.

The Board appreciates the cooperation of all parties and the information presented for review in order to make this recommendation. Please remember that a Boards recommendation requires acceptance or rejection within 15 days. Failure to respond to the DRB and other parties within the time frame constitutes an acceptance by both parties.

I certify that I have participated in all meetings and discussions regarding the issues and concur with the findings and recommendation.

Respectfully submitted, Disputes Review Board

Ralph Ellis Jr. – Chairman Robert A. Cedeno – Member Dallas L. Wolford - Member

Signed for all with the concurrence of all members.

RayLD. Elig.

Ralph D. Ellis, Jr. Chairman